

# United States Coast Guard Aeromedical Electronic Resource Office Guide

#### Introduction

This guide has been adapted from the US Army Aeromedical Activity Guide for use by Coast Guard Providers. It is intended to assist Aeromedical Providers with the transition to using the Aeromedical Electronic Resource Office (AERO) for the completion of aviation medical examinations.

Since AERO was created by the US Army, there are several instances in which AERO uses terms/definitions that are different from those used by the Coast Guard. After thorough comparison of the standards used by AERO and those historically used by the Coast Guard, it was determined that the differences were not significant. As a result, the Directorate of Health, Safety, and Work-Life and the Personnel Service Center have agreed to adopt the standards used by AERO as stated in this document for the disposition of routine flight physicals.

The standards for the disposition of Aeromedical **Waivers** will continue to be derived from the CG Aviation Medical Manual with consultation from the US Army Aeromedical Activity (USAAMA) Aeromedical Policy Letters (APL's) as well as the US Naval Operational Medicine Institute (NOMI).

#### **Individuals Authorized to Perform Aviation Medical Exams**

The Coast Guard uses several types of aeromedical providers to perform aviation medical exams per COMDTINST M6410.3. All of the aeromedical providers are authorized to conduct the medical history review and physical examination; however, Aeromedical Physician Assistants are required to obtain the co-signature of their supervising aeromedical physician prior to submitting the flight physical. The following table is a list of all aeromedical providers and their authorized aeromedical exam duties:

Aaramadisal	Aeromedical Physician	Flight Surgeon	FS	
		Flight Surgeon Trainee	FST	Perform and Submit Exams
		Aviation Medical Officer	AMO	
Aeromedical Physici		ian Assistant	APA	Perform Exams

## **Types of Physicals and Expiration Date**

As the Coast Guard begins to share aeromedical systems and documents with the Army and Navy, it is important to note that the terms *Aeromedical Exam*, *Aviation Medical Exam*, *Flight Duty Exam* and *Flight Physical* are used interchangeably. The important distinction is whether it is an *Initial Medical Exam*, a *Comprehensive Medical Exam* (biennial exam) or a *Health Screening*. All of which are completed with the annual Periodic Health Assessment (PHA).

There are three broad categories of aviation or flight duty medical exams. They are as follows:

- A. **Initial Flight Duty Medical Exam (FDME)**—Performed for accession purposes and is comprehensive. This is valid for up to 12 months regardless of physical class.
- B. Comprehensive FDME— Performed on aircrew every 2 years until age of 49 and then annually thereafter. This is equivalent to the historical comprehensive Biennial Flight Physical. It is synchronized to expire at the end of the aircrew member's birth month at which time s/he will be due for the Periodic Health Assessment (PHA) and FDHS. Comprehensives may be done more frequently at the discretion of the aeromedical provider or as part of the requirements for aeromedical waivers or after a mishap. The PHA requirement will consist of the FDME in AERO, review of the member's fleet HRA, and appropriate documentation in the electronic health record.
- C. Flight Duty Health Screen (FDHS)—Performed on aircrew in conjunction with their PHA for those years in between the comprehensive FDMEs. It is synchronized to expire at the end of the aircrew member's birth month at which time s/he will be due for an FDME. The PHA requirement will consist of the FDHS in AERO, review of the member's fleet HRA, and appropriate documentation in the electronic health record.

# **Aeromedical Standards Class or Physical Class:**

Flight physicals are typically referred to by the specific "class" or more accurately, by the aeromedical standards classification that apply to an aircrew member. The type of duties performed by the aircrew member as well as whether s/he is an applicant or a trained crewmember determines the applicable standards.

The following AERO Classifications are different than the classifications historically used by the Coast Guard. In order for AERO to apply the correct standards to the aviator's physical examination, it is critical to use the classification scheme described below. All physicals are centrally reviewed and given final disposition by CGPSC

## CLASS 1

Class 1 comprises all pilot examinations for both initial entrance (accession) physical and current (rated) aviator exams. If the Class 1 **Initial** exam expires or is about to expire prior to reporting date, the applicant must repeat, submit, and have on record a qualified Class 1 physical. Class 1 can be further broken down as follows:

- **Initial Class 1:** For initial entrance (accession) aviation medical examination.
- Comprehensive Class 1: For current (rated) aviators. It is equivalent to the biennial aviation medical examination.
- **Interim Class 1:** For current (rated) aviators. The FDHS is done with the PHA in the years that a comprehensive FDME is not required.

## CLASS 2

Class 2 comprises all Flight Surgeons (FS), Flight Surgeon Trainees (FST), and Aeromedical Physician Assistants (APA). Class 2 can be further broken down as follows:

- **Initial Class 2:** For new FS's, FST's, and APA's.
- Comprehensive Class 2: For current FS's, FST's, and APA's. It is equivalent to the biennial aviation medical examination.
- Interim Class 2: For current FS's, FST's and APA's. The FDHS is done with the PHA in the years that a comprehensive FDME is not required.

## CLASS 3

Class 3 encompasses all other crewmembers by competent authority to fly in Coast Guard aircraft. This includes Swimmers, Flight engineers, Flight Corpsman, AMS's and Crew Chiefs. Class 3 can be further broken down as follows:

- **Initial Class 3:** For new aircrew.
- Comprehensive Class 3: For current aircrew. It is equivalent to the biennial aviation medical examination.
- **Interim Class 3:** For current aircrew. An FDHS is done with the PHA in the years that a comprehensive FDME is not required.

## **SPECIAL DUTY**

This category is for special duty, diving, combat, marine, HBO technician and similar types of physicals.

# **Timing of Physical Examinations:**

An aviation medical exam is required annually (either a comprehensive or screening exam) and is performed within 3 months before the end of the birth month. The period of validity of the biennial physical will be aligned with the last day of the service member's birth month. (Example: someone born on 3 October would have August, September, and October in which to accomplish his/her physical. No matter when accomplished in that time frame, the period of validity of that exam is until 31 October the following year.)

**Realigning with Birth Month:** In order to avoid repeating an aviation medical examination unnecessarily, a process of realigning the exam with the aviator's birth month is authorized (See Table 1).

Example: A crewmember has a July birth month, but he just had an FDME post-mishap in February, the flight surgeon can extend that validity of clearance until July of the following year instead of performing another FDME/FDHS in five months. In this example, the FDME will have a period of validity of 17 months (remember, the maximum allowed is 18 months).

**Table 1:** Number of months for which a flight physical is valid:

Birth	Montl	Month in which the Flight Physical was given										
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Jan	12	11	10	9	8	7	18	17	16	15	14	13
Feb	13	12	11	10	9	8	7	18	17	16	15	14
Mar	14	13	12	11	10	9	8	7	18	17	16	15
Apr	15	14	13	12	11	10	9	8	7	18	17	16
May	16	15	14	13	12	11	10	9	8	7	18	17
Jun	17	16	15	14	13	12	11	10	9	8	7	18
Jul	18	17	16	15	14	13	12	11	10	9	8	7
Aug	7	18	17	16	15	14	13	12	11	10	9	8
Sep	8	7	18	17	16	15	14	13	12	11	10	9
Oct	9	8	7	18	17	16	15	14	13	12	11	10
Nov	10	9	8	7	18	17	16	15	14	13	12	11
Dec	11	10	9	8	7	18	17	16	15	14	13	12

**Note:** Read down the left column to the examinee's birth month; read across to month of the physical completed; intersection number is the maximum validity period.

The requirement to perform a comprehensive exam (biennial exam) will not be suspended in the event of training exercises or deployment. Aircrew with scheduled deployment during their 3 month window to accomplish their biennial exam may accomplish their biennial exam an additional 90 days prior and continue with the same valid end date. This may result in a member having a valid biennial for 18 months. Members unable to accomplish a biennial exam prior to being deployed will be granted an additional 60 days upon return in which to accomplish their physical. Align subsequent aviation medical exams with the aircrew member's birth month using Table 1.

<u>A comprehensive physical may be required</u> during a post-mishap investigation, Flight Evaluation Board (FEB), or as part of a work-up for a medical disqualification.

Once designated in an aviation category, personnel are required to maintain a biennial or annual aviation exam schedule regardless of current aviation duty status.

#### COMPLETING THE FLIGHT PHYSICAL PAPERWORK

To ensure a FDME/FDHS is completed properly, use AERO and the checklists during the completion of the physical. The following pages provide checklists for all physicals (tables 2 through 7). Physicals are commonly broken down into two parts—Part 1, the setup, and Part 2, the aeromedical provider's exam. This is an artificial break to allow time for the labs, vision, hearing, and paperwork to be completed and resulted, but is **not** required. This process is utilized at most Army & Coast Guard clinics. However some clinics have the ability to complete the exam without delay. The checklists are an aid for the aviation medicine clinic staff in completing "PART 1" of the physical. With the few requirements for the FDHS, both parts can easily be completed the same day. Be sensitive to the needs of your crewmembers and if necessary, conduct the *entire* physical on the same day (Part 1 in the morning, Part 2 in the afternoon).

#### <u>Part 1</u>

Part 1 of a physical consists of compiling all the information/data required on the DD Form 2807-1 and DD Form 2808 or DA Form 4497-R. It covers:

- Personal information
- Past medical history
- Vital signs/Anthropometrics/Standing Balance
- Vision testing
- Audiology
- ECG (Only required on initial FDMEs and then annually after age 40 as part of Cardiovascular screening program.)
- Dental
- Pap result (Not required on Initial FDMEs)

- Required Labs
- Review and completion of any annual waiver or information requirements
- Creation and data entry into AERO

#### Part 2

Part 2 is the Aeromedical Provider's "hands-on" part of the physical. Ideally, all the data collected in Part 1 is in AERO and available for review when the patient returns for Part 2. This way, the physical exam may be completed and submitted in AERO. In addition, this is the time to address PHA/preventive health measures and key areas of medical history, such as cardiovascular risk factor reduction and use of dietary supplement/herbals or OTC products. Detailed guidance for the completion of the examination portion of DD Form 2808 can be found in applicable ATBs below, which include information for the completion of additional aviation specific tests.

# **Required Forms**

Initial and Comprehensive FDME: Utilize the electronic version of the most current DD Form 2807-1 and DD Form 2808.

Interim FDHS/Flying Duty Health Screen: Performed on electronic version of the most current DA Form 4497-R.

#### **FDME/FDHS Checklists**

Notice that the checklists have several features to ensure accuracy and completeness. There is no requirement to use these checklists—it is furnished as an aid for clinic operations. AERO is in sync with the checklists. Some issues to consider:

- 1. DOB and "age for this exam" are noted at the very top. This will help you determine:
  - Does he/she require a comprehensive or interim exam?
  - Is the patient over 40? (triggers over-40 requirements)

Remember that when a crewmember reports for his comprehensive FDME, this is usually reporting one or two months prior to the birth month. In determining the type of physical (comprehensive or abbreviated), annotate the age for the upcoming birthday. Example: a crewmember is 38 today but will be 39 next month. Use 39 as the "age for this exam".

- 2. Good telephone, address, and email points of contact are noted in order to facilitate contact with the patient.
- 3. Notice there are only three types of physical exams regardless of the class.
  - Initial
  - Comprehensive
  - Interim (Abbreviated)

**Note:** There are subtle differences between a class 1 initial and a class 3 initial FDME—those differences are annotated in the table 3. Keep it simple—there are only three types of physicals. Select the applicable column and ensure all items in the column are completed.

- 4. There are two additional sections that are age dependent and may be applicable. If they are, ensure they are completed. These sections are listed immediately following the three main columns. They are required for all types of physicals (initial, comprehensive and abbreviated).
  - Over 40
  - Retirement/Separation
- 5. The last section allows the administrative staff to note any additional tests or studies that may be required (i.e. Coast Guard unique requirements, "For Information Only" or Waiver requirements). If the aircrew member has a waiver, a copy should be kept in the Health Record (HREC). Additionally, there shall be a copy of the Aviation Epidemiology Data Registry (AEDR) printout attached to the last qualified physical in the HREC. The AEDR is available via AERO query. The AEDR printout will also mention if any waivers are in effect and if any additional tests or studies are required beyond those listed in the APLs. If any additional tests or studies are required, the clinic staff should order them early to ensure the results are back in time for "Part 2." If there are any questions about additional requirements, the clinic staff should address them with the aeromedical provider during "Part 1." Tables 3 and 4 provide a consolidated list of physical requirements by type.

Table 2: Summary of Requirements for FDME/FDHS (13 JAN 2008)

Class 1 and All Initial Class 2, 3 and 4  Comprehensive FDME: every 2 years between the ages of 20 and 50 and then annually thereafter  DD Form 2807-1 completion  Vital signs BP, Pulse, Ht, Wt, Waist Circ (in cm) Standing Balance Test Anthros (Class 1 only)  Vision Vision NPC, 1OPs, Color vision, Stereopsis/Depth Perception, Visual fields, Night vision Hx  Audio  Audio  Audio  ECG  Dental  Labs Labs Labs Labs Labs Sickledex (excluding class 4 and UAS) and then annually thereafter  Nital signs BP, Pulse, Ht, Wt, Waist Circ (in cm) Vision NPC, 1OPs, Color vision, Stereopsis/Depth Perception, Visual fields, Night vision Hx  Audio  Pap & Pelvic (Gyn Report accepted)  Notes:  Notes: SEE BELOW FOR 40 & older Notes:  Annual PHA  Comprehensive FDME: every 2 years between the ages of 20 and 50 and then annually thereafter  DD Form 2807-1 Completion  DD Form 2	Home Phone ( )	*HIV Req.? Date:					
## ages of 20 and 50 and then annually the ages of 20 and 50 and then annually the reference of the content of	Work Phone ( )	this exam:	YES / NO				
thereafter			FDHS				
DD Form 2807-1 Completion	All Initial Class 2, 3 and 4						
Vital signs BP, Pulse, Ht, Wt, Waist Circ (in cm) Standing Balance Test Andtros (Class 1 only)  Vision  Vision	DD Form 2807-1 completion		DD Form 2807-1 Completion				
Refraction   Audio	Vital signs	Vital signs BP, Pulse, Ht, Wt, Waist Circ (in cm) Vision □ VAs, Phorias by AFVTA, Stereopsis/Depth Perception, Color vision □ Manifest Refraction / Eyeglass Rx	Vital signs				
Cycloplegic (Class 1 only)     Manifest (Eyeglass Rx) (All classes if uncorrected worse than 20/20¹) Audio  Pap & Pelvic (Gyn Report accepted)  Pap & Pelvic (Findantic accepted)	-	Andio	20/20 <sup>-1</sup> )				
Manifest (Eyeglass Rx) (All classes if uncorrected worse than 20/20¹) Audio	Refraction	Audio					
CAll classes if uncorrected worse than 20/20 <sup>-1</sup>   Audio	• Cycloplegic (Class 1 only)		Audio				
Dental   Labs   Labs   Labs   Labs   Labs   Labs   None unless clinically indicated or per waiver requirements or over 40   HDL, LDL, Trig, FBS   Molecular requirements or over 40   HDL, LDL, Trig, FBS   Molecular requirements or over 40   HDL, LDL, Trig, LDL   HDL, LDL, Trig, FBS   Molecular requirements or over 40   HDL, LDL, Trig, LDL   HDL, Trig, LDL   Molecular requirements or over 40   Molecular requirements or ove	(All classes if uncorrected worse than 20/20 <sup>-1</sup> ) <b>Audio</b>						
Labs  □ UA w/ microscopic, HCT, HIV, FBS, Sickledex (excluding class 4 and UAS), Chol, HDL, Trig, LDL  Notes: □ RAT and AA (ARMA) □ Refractive Surgery-see APL □ Contact Lens Wear-see APL □ Rectal & guaiac (Rectal by inspection to age 39. DRE/stool guaiac/Prostate required at age 40 and over)  Age 40 and over (for all classes; initial /comprehensive FDME and FDHS), add: □ Restal and Stool guaiac on comprehensive sonly □ Prostate and PSA (Males- on comprehensive examinations only) □ Mammogram: 40,42, 44,46,48,50, then yearly (required for all AP) Form 2808, Statement Remarks: "Not afraid of dark spaces or confined places"  Labs □ None unless clinically indicated or per waiver requirements or over 40 □ None unless clinically indicated or per waiver requirements or over 40 □ Notes: □ WaslaVa □ "Health Screening" / Directed Physical Exam / Annual PHA □ Dental and Pap/Pelvic are recommended for health promotion but are not required FDHS entries □ Pasting Blood Sugar, Lipids □ CVSP (Cardiac Risk Index calculated by AERO) □ Rectal and Stool guaiac on comprehensive sonly □ DD Form 2697 □ DD Form 2697 □ Counseling on Hepatitis C screening NOTE: Must be a comprehensive exam □ IOPs □ EKG  Additional tests, studies and consults for Waivers and Information Only Conditions: see APLs Class 1 and Avn SERE: #40, DD Form 2808, Statement Remarks: "Not afraid of dark spaces or confined places"	= = ===================================		Pap & Pelvic (Gyn Report accepted)				
□ UA w/ microscopic, HCT, HIV, FBS, Sickledex (excluding class 4 and UAS) , Chol, HDL, Trig, LDL  Notes: □ RAT and AA (ARMA) □ Valsalva □ Refractive Surgery-see APL □ Contact Lens Wear-see APL □ Contact Lens Wear-see APL □ Restractive Surgery-see initial /comprehensive required at age 40 and over (for all classes; initial /comprehensive required at age 40 and over)  Age 40 and over (for all classes; initial /comprehensive sonly □ Prostate and PSA (Males- on comprehensive sonly □ Prostate and PSA (Males- on comprehensive examinations only) □ Prostate and PSA (Males- on comprehensive examinations only) □ Mammogram: 40,42, 44,46,48,50, then yearly (required for all AD females) □ IOPs □ EKG  Additional tests, studies and consults for Waivers and Information Only Conditions: see APLs Class 1 and Avn SERE: #40, DD Form 2808, Statement Remarks: "Not afraid of dark spaces or confined places"							
Notes: SEE BELOW FOR 40 & older  RAT and AA (ARMA)  Valsalva  Refractive Surgery-see APL  Contact Lens Wear- see APL  Rectal & guaiac (Rectal by inspection to age 39. DRE/stool guaiac/Prostate required at age 40 and over)  Age 40 and over (for all classes; initial/comprehensive FDME and FDHS), add:  Fasting Blood Sugar, Lipids  CVSP (Cardiac Risk Index calculated by AERO)  Rectal and Stool guaiac on comprehensives only  Prostate and PSA (Males- on comprehensive examinations only)  Mammogram: 40,42, 44,46,48,50, then yearly (required for all AD females)  IOPs  Additional tests, studies and consults for Waivers and Information Only Conditions: see APLs  Class 1 and Avn SERE: #40, DD Form 2808, Statement Remarks: "Not afraid of dark spaces or confined places"	☐ UA w/ microscopic, HCT, HIV, FBS, Sickledex (excluding class 4 and UAS) ,	□ *HIV, UA w/ microscopic, HCT, Chol,	☐ None unless clinically indicated or per				
□ Fasting Blood Sugar, Lipids □ CVSP (Cardiac Risk Index calculated by AERO) □ Rectal and Stool guaiac on comprehensives only □ Prostate and PSA (Males- on comprehensive examinations only) □ Mammogram: 40,42, 44,46,48,50, then yearly (required for all AD females) □ IOPs □ EKG  Additional tests, studies and consults for Waivers and Information Only Conditions: see APLs Class 1 and Avn SERE: #40, DD Form 2808, Statement Remarks: "Not afraid of dark spaces or confined places"	Notes:  □ RAT and AA (ARMA) □ Valsalva □ Refractive Surgery-see APL □ Contact Lens Wear- see APL □ Rectal & guaiac (Rectal by inspection to age 39. DRE/stool guaiac/Prostate		<ul> <li>□ "Health Screening" / Directed Physical Exam / Annual PHA</li> <li>□ Dental and Pap/Pelvic are recommended for health promotion but are not</li> </ul>				
Class 1 and Avn SERE: #40, DD Form 2808, Statement Remarks: "Not afraid of dark spaces or confined places"	□ Fasting Blood Sugar, Lipids □ CVSP (Cardiac Risk Index calculated □ Rectal and Stool guaiac on comprehen □ Prostate and PSA (Males- on comprehe □ Mammogram: 40,42, 44,46,48,50, ther □ IOPs	by AERO) sives only ensive examinations only)	<ul> <li>□ Perform a comprehensive FDME</li> <li>□ CXR if age 40 or over</li> <li>□ DD Form 2697</li> <li>□ Counseling on Hepatitis C screening</li> </ul>				
Class 1 and Avn SERE: #40, DD Form 2808, Statement Remarks: "Not afraid of dark spaces or confined places"	Additional tests, studies and consults for Waivers and Information Only Conditions: see APLs						
Last name First MI Rank Provider's Stamp Status			confined places"				
Last name First M1 Kank Provider's Stamp Status	Last years	D	84-4-				
	Last name First MI	Kank Provider's Stamp	Status				
		•					

Table 3: Summary of DD Form 2808, Jul 2001

Items	Class 1 and Class 2/3/4 Initial	Class 2/3/4 Comprehensive
1-16. Admin Data	Y	Y
17-44. Clinical Exam	Y	Y
	Y	
Dental Valsalva		Y N
	Y(1)	
Digital Rectal	Y(By Inspection, DRE $\geq$ age 40)	Y (By Inspection, then DRE $\geq$ age 40)
Stool Guaiac	(2)	(2)
45a. Urine Albumin	Y	Y
45b. Urine Glucose	Y	Y
47. Hematocrit or Hb	Y	Y
49. HIV	Y	(3)(4), Force Protection Q2 years
	Annotate date drawn	Annotate date drawn
52a. Pap smear	N	(3)
52c. Sickledex	Y(1)	N
53. Height	Y	Y
54. Weight	Y(10)	Y(10)
Waist Measurement (in cm)	(7)(10)	(7)(10)
55. % Body Fat	N	N
57. Pulse	Y	Y
58a. Blood Pressure -	Y	Y
Only one reading req.		
60. Other vision:	Class 1 Only	N
Cycloplegic Refraction		
(Annotate procedure in block 73.		
Notes)		
61. Distant Vision	Y	Y
62. Manifest Refraction	(6)	(6)
63. Near Vision	Y	Y
64. Heterophorias	Y	Y
Cover Test / Cross-cover	Y	N
Near Point Convergence	Y	N
66. Color Vision	Y	Y
67. Depth Perception	Y	Y
68. Field of Vision	Y	N
69. Night Vision History	Y	N
70. IOPs	Y	(2)(3)
71a. Audiometer	Y	Y
72a. Reading Aloud Test	Y	N
72b. Valsalva	(1)	N
73. Notes		
Additional Lab:		
Urine Micro (WBC, RBC)	Y(9)	Y(9)
Total Cholesterol	Y	Y
HDL, LDL, Triglycerides	Y	Y
PSA	N ( Unless >40 Y/O)	(2)
CAD Risk Index	N ( Unless >40 Y/O)	(2)
Fasting Glucose	Y	(2)(3)
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Items	Class 1 and Class 2/3/4 Initial	Class 2/3/4 Comprehensive
73. Notes (cont.)		
ECG	Y	(2)
CXR	N	(3)
Anthropometrics	Class 1	N
Standing Balance Test	All	
Aeronautical Adaptability (formerly	Y	N
known as ARMA)		
Cycloplegic Protocol	Class 1 Only	N
74a. Qualification	Y	Y
77. Summary of Defects	Y	Y
78. Recommendations	Y	Y
81a-84b. Examiner names and	Y	Y
signatures		

#### Notes:

- (1) Not required for Class 4 (Air Traffic Controllers).
- (2) Required age 40 and older.
- (3) Required if medically indicated or required by the U.S. Army PrevMed program.
- (4) HIV testing in civilian aircrew members is voluntary, not required.
- (5) Required when weight exceeds Coast Guard weight tables.
- (6) Required if unaided near/distant vision is not 20/20<sup>-1</sup>.
- (7) Required as per APL "Cardiovascular Screening Program" and/or "Metabolic Syndrome."
- (8) Recommended annually, report of exam required only on comprehensive FDME.
- (9) Urinalysis Dipstick Results of ALL Negative for Blood, Nitrite, and Leukocyte Esterase are acceptable for RBC and WBC NEG annotations. Microscopic evaluation is not required.
- (10) If calculated BMI >29.9, waist circumference (in cm) required. Annotate in AERO, page 4, or in remarks section.

Table 4: Summary of DA Form 4497-R, Mar 2002(1)

Items	Class 2, 3, and 4 Interim FDHS
1-14b. Admin Data	Y
15. Blood Pressure	Y
16. Pulse	Y
17. Height	Y
18. Weight	Y(9)
Waist Measurement (in cm)	(7)(9)
20a. Depth Perception Test	Y
20b. Test Score	Y
20c. Test Result	Y
21a. Distant Visual Acuity	Y(6)
21b. Near Visual Acuity	Y(6)
(document manifest refraction if vision	
requires correction to achieve 20/20 <sup>-1</sup> )	
22. Intraocular Pressure	Y (2)(3)
23. Audiometry Screening	Y
24. History and Physical	DD2807-1 and focused physical as req'd
Rectal Exam	(3)
Stool Guaiac	(3)
Pelvic / Pap	(3)
HIV	(3)(4)
	Force Protection = Q2 years
	Annotate date drawn
Fasting Glucose	(2)(3)
Total Cholesterol	(2) (3)(7)
HDL, LDL	(2)(7)
Triglycerides	(2)(7)
CAD Risk Index	(2)(7)
25. ECG	(2)(3)(7)
26. Recommendation	Y
27. APA name and signature	Y
28. FS name and signature	Y

#### **Notes:**

- (1) Not required for Civilian or Contract Class 4 (Air Traffic Controllers).
- (2) Required age 40 and older.
- (3) Required if medically indicated or required by the CG PrevMed program.
- (4) HIV testing in civilian aircrew members is voluntary, not required.
- (5) Required when weight exceeds Coast Guard weight tables.
- (6) Required if unaided near/distant vision is not 20/20 or better.
- (7) Required as per APL "Cardiovascular Screening Program" and/or "Metabolic Syndrome."
- (8) Recommended Annually, report only required on comprehensive FDME
- (9) If calculated BMI >29.9, waist circumference (in cm) required. Annotate in AERO DA 4497-R, or remarks section.

<sup>\*\*\*</sup>A dental exam is not required on this exam but it is still required for medical force readiness. -- don't forget to have all aviators complete their birth month exam!

Table 5: Summary of Aeromedical Standards—Vision, Hearing, Labs, Anthropometrics (13 JAN 08)

Aeromedical Vision Standards								
Cyclople	egic Refraction Standards	Visual Ac worse tha	cuity, DQ if n:	Phorias, DQ if:				
Class	[ Qualified ]	Distant	Near	Eso	Exo	Hyper		
1	Sphere: $DQ < -1.50 \text{ to } +3.00 < DQ$	20/50	20/20-1	>8	>8	>1		
	Cyl: $DQ < -1.0 \text{ to } +1.0 < DQ$							
2/3/4	NOT REQUIRED	20/400	20/400	>8	>8	>1		

Class	Cover-Uncover	Cross-Cover	NPC DQ if:	Color Vision DQ if:
	Test	Test		
1 and 2/2F/3/4 Initial	Any detectable movement referred to	Any detectable movement referred to	>100 mm	<b>PIP</b> : 3 or more errors out of 14 plates, and/or failing the PIP2 or F2 single plateAND
	optometry	optometry		<b>FALANT</b> : any errors out of 9 presentations
2/3/4 Other	Not Req	Not Req	Not Req	Req for FDMEs—standards above

All Classes of Aeromedical Standards				
Field of Vision, DQ if:	Any Defects			
Depth Perception,	>40 seconds of arc at 20 feet:			
DQ if:	• Any error in block B of the AFVT or OPTEC 2300, or			
	• Any error in lines 1 through 9 for Titmus II, or			
	• Any errors in lines 1 through 7 of the 10 levels for Randot Circles test			
IOP, DQ if:	<8 or >21 mmHg in either eye or, 4 or more mmHg difference between eyes			
	If <8 and due to PRK/LASIK, so state on FDME/FDHS			

Aeromedical Audiology Standards								
Qualified	Qualified if Equal or Better than:							
Class	500Hz	1000Hz	2000Hz	3000Hz	4000Hz	6000Hz		
1	25 dB	25 dB	25 dB	35 dB	45 dB	45 (see APL)		
2/3/4	25 dB	25 dB	25 dB	35 dB	55 dB	65 (see APL)		

Laboratory Normal Values, All Classes						
HCT/Hb	Male 40% - 52% (	(14-18 gm/dl)	Female 37% -	47%(12-16 gm/dl)		
<b>UA Dipstick</b>	Gluc Neg	Prot Neg	Micro / Dipstick	<5 RBC / Neg	<5WBC / Neg	

Category	Fasting Blood Sugar	2-Hour Post-Prandial
Normal	<110	<140 ( <b>HbA1C &lt; 7.0</b> )
Impaired Glucose Tolerance	110 < FBS < 126	140< 2HPP< 200
Diabetes Mellitus	>126	>200
Gestational Diabetes Mellitus	>105	>165

Anthropometric Standards Class 1/2 (optional for other classes) Qualified if:	
Total Arm Span, (TAS)	Greater than or equal to 164cm
Crotch Height, (CH)	Greater than or equal to 75cm
Sitting Height, (SH)	Less than or equal to 95cm for career transition to OH58 / TH67
	Less than or equal to 102cm for all others

# **Special Tests—Aviation Unique**

The flight physical is conducted just like any other physical exam. The procedure is the same. There are a few items that are commonly checked on the flight physical that most physicians are unfamiliar with because they are unique. Some of these items may be performed differently between the various military services and the FAA. These tests and procedure instructions are written in the form of Technical Bulletins as follows:

- Aeronautical Adaptability
- Aeromedical Graded Exercise Tolerance (AGXT) Test
- Visual Acuity Testing- Distant Vision
- Visual Acuity Testing- Near Vision
- Depth Perception Testing
- Color Vision Testing
- Cycloplegic Refraction
- Field of Vision Testing
- Manifest/Subjective Refraction
- Night Vision
- Ocular Motility
- Reading Aloud Test
- The Valsalva Maneuver
- Anthropometrics Measurements

# **Aeromedical Disposition**

The Aeromedical Provider first makes the fitness for duty determination after careful examination and thoughtful application of current aeromedical standards and documents the exam on the DD2808 or DA 4497 in AERO. Figure 1 contains the flow diagram of creation and disposition of aviation medical examinations.

**All Classes** of Physicals are submitted directly to CGPSC for review and disposition. Once CGPSC has made their disposition, AERO will display the disposition in a 2 letter code and the appropriate stamp will appear on the physical.

Medically Qualified (QU, QI (Qualified, Information Only)): Whenever a crewmember meets the aeromedical standards set forth in COMDTINST M6410.3 and the Aeromedical Policy Letters (APLs).

**Medically Disqualified (DQ, DI (Disqualified Incomplete)):** Whenever a crewmember does not meet the medical standards set forth in COMDTINST M6410.3 and the APLs or is not able to safely perform the duties required, the crewmember is said to be medically disqualified from aviation service. Incomplete physicals shall be identified for deficiencies and corrected with submission of additional information missing or an aeromedical summary per the APLs. Physicals that are submitted as "disqualified," completed but with an identifiably disqualifying and non-waiverable condition, still require an AMS to terminate ACIP as well as alert CGPSC of unit manning/assignment issues.

### **Waiver Review and Disposition**

All New Waivers will be reviewed by CGPSC and a recommendation will for disposition will be forwarded to appropriate departments.

# **Aeromedical Summary**

In order for an aircrew member to receive a waiver or exception to policy, the aeromedical provider performs a thorough medical evaluation of the condition and documents the evaluation in an Aeromedical Summary (AMS) IAW the CG Aviation Medical Manual. The aeromedical provider then submits the AMS in AERO with his/her recommended aeromedical disposition (waiver/ETP recommended versus not recommended) to the CGPSC.

The AMS is often submitted with the FDME/FDHS, but this is not required. However, a current FDME/FDHS (within the past 24 months) on file with AERO is required. An AMS concludes with the aeromedical provider's recommendation, a simple declarative statement of what will be best for the individual, flying safety, and the Coast Guard. The recommendations should focus on whether the individual is medically qualified and safe to fly. The aeromedical provider should state the specific chapter/paragraph regulating the condition and any appropriate APLs. The aeromedical provider must remain strictly

objective and not allow personal likes or dislikes, any outside pressure, or personal biases to influence this decision. This recommendation should include any restrictions as well as recommendations for follow-up or need for further consultation, which is appropriate but unavailable at the location. CGPSC can help coordinate further evaluation/consultation as necessary.

#### ORGANIZATION OF DOCUMENTS FOR AERO SUBMISSION

With AERO being a web-based, electronic submission, follow the generated template to complete the submission. Cut and paste pertinent information from the electronic health record (EHR) or word processing documents as required. For complicated or lengthy information, it is acceptable to provide a summary of EHR referenced information. **AERO does not allow attaching scanned information yet—supplemental information such as Consult Reports or Letters of Recommendation through CO should be referenced in the AMS and emailed to <a href="mailto:cgmedreview@uscg.mil">cgmedreview@uscg.mil</a>.** 

#### ORGANIZATION OF DOCUMENTS FOR HARD-COPY SUBMISSION

For more complex cases, the entire AMS packet may be requested by CGPSC for review prior to making a decision. It will be important to organize and tabulate the documents in the following order:

- Cover letter, if included
- Aeromedical Summary from AERO
- Enclosures:
  - Any available supportive consultations and reports of all operations;
  - Lab reports, pathology report, tissue examinations;
  - Reports of all studies: x-rays, pictures, films, or procedures (ECG, AGXT, Holter, ECHO, cardiac scans, catheterization, endoscopic procedures, etc.);
  - Hospital summaries and past medical documents (e.g., hospital summaries); reports of any proceedings (tumor board, MEB, PEB, FEB);
  - Letters of recommendation.

# Aeromedical Epidemiology Data Registry (AEDR)

Enacted in 1973 per AR 40-501, the AEDR, maintained by USAAMA, contains the medical information concerning the physical and historical data related to Army aviators, which has been migrated and tied into AERO. With USAAMA disposition on FDME/FDHS, entries are made in AERO that appear in the medical history and printed cover sheet document. With hardcopy submissions, this document is returned with the original FDME/FDHS to the originating/return facility or becomes available electronically. The local aeromedical provider office and the crewmember should review this on an annual basis, insure compliance with any annual waiver or information requirements, and submit corrections or changes electronically via the AERO/CG helpdesk.

The AEDR provides the compilation of aeromedical history for use in retrospective analyses, ecologic demographic research, and queries from the Commandant, CGPSC, and sister services. Data is used in review and revision of aeromedical policy and standards. AERO and the AEDR is secured and closely monitored to remain in compliance with HIPAA and security directives. Requests for research or queries should be directed to the Director, USAAMA, or Deputy Director for Administration. Information from the AEDR is sanitized of unique personal identifiers prior to release.